WHAT IS CLAIMED IS:
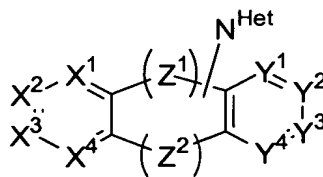
1. An assay for identifying a compound useful for blocking CMV dissemination is a host, comprising the step of determining whether said compound inhibits the binding of a chemokine to US28 or a US28 fragment.

2. An assay in accordance with claim 1, wherein said chemokine is selected from the group consisting of fractalkine, MIP-1α, MIP-1β, MCP-1 and RANTES.

3. An assay in accordance with claim 1, wherein said chemokine is fractalkine.

4. An assay in accordance with claim 1, wherein said step of determining comprises specifically binding labeled fractalkine to the ligand binding domain of US28.

5. A method for preventing dissemination of CMV in a human, comprising administering an effective amount of a compound which blocks the binding of a chemokine to US28 or a US28 fragment.

6. A method in accordance with claim 5, wherein said compound was identified by the assay of claim 1.

7. A method in accordance with claim 5, wherein said compound has the formula:

wherein

X^1, X^2, X^3 and X^4 are each independently members selected from the group consisting of N and C-R^1, wherein R^1 is a member selected from the group consisting of H, halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkyl, (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino, and di(C_1-C_4)alkylamino;

10   Y^1, Y^2, Y^3 and Y^4 are each independently members selected from the group

11   consisting of N and C-R^2, wherein R^2 is a member selected from the group

12   consisting of H, halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkyl,

13   (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino,

14   and di(C_1-C_4)alkylamino;
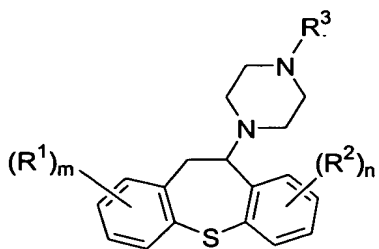
15   Z^1 is a divalent moiety selected from the group consisting of (C_1-C_3)alkylene;

16   Z^2 is a divalent moiety selected from the group consisting of –O-, -S- and -N(R^3)-

17   wherein R^3 is a member selected from the group consisting of H, halogen,

18   (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkyl, (C_1-C_4)haloalkoxy, nitro,

19   cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino, and di(C_1-C_4)alkylamino;

20   and

21   N^{Het} is a substituted or unsubstituted 4-, 5-, 6-, or 7-membered nitrogen

22   heterocycle.

1   8.   A method in accordance with claim 7, wherein X^1, X^3, X^4, Y^1, Y^2,

2   Y^3 and Y^4 are all CH; Z^2 is –S-, and N^{Het} is a substituted 6-membered nitrogen

3   heterocycle.

1   9.   A method in accordance with claim 5, wherein said compound has

2   the formula:

3

4   wherein

5   the subscripts m and n are independently integers of from 0 to 3;

6   R^1 and R^2 are substituents independently selected from the group consisting of

7   halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)alkylthio, (C_1-C_4)haloalkyl,

8   (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino,

9   and di(C_1-C_4)alkylamino; and

10   R^3 is a substituent selected from the group consisting of (C_1-C_4)alkyl, (C_1-

11   C_4)haloalkyl and (C_1-C_4)acyl.

1   10.   A method in accordance with claim 9, wherein m is 0 and n is 1.

1   11.   A method in accordance with claim 9, wherein m is 0, n is 1 and R^2

2 is selected from the group consisting of halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, $(C_1-$

3 $C_4)$alkylthio and (C_1-C_4)haloalkyl.

1   12.   A method in accordance with claim 9, wherein m is 0, n is 1 and R^2

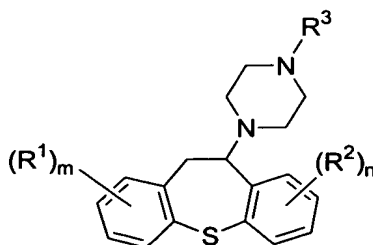2 is selected from the group consisting of halogen and (C_1-C_4)alkylthio.

1   13.   A method in accordance with claim 5, wherein said compound is

2 selected from the group consisting of methiothepin, octoclothepin and pharmaceutically

3 acceptable salts thereof.

1   14.   A method for reducing cell motility in a CMV-infected cell, said

2 method comprising contacting said CMV-infected cell with a motility-reducing amount of

3 a compound that inhibits chemokine binding to US28 on the surface of said infected cell.

1   15.   A method in accordance with claim 14, wherein said chemokine is

2 a member selected from the group consisting of fractalkine, MIP-1α, MIP-1β, MCP-1

3 and RANTES.

1   16.   A method in accordance with claim 14, wherein said chemokine is

2 fractalkine.

1   17.   A method in accordance with claim 14, wherein said compound

2 has the formula:

3

4 wherein

5   the subscripts m and n are independently integers of from 0 to 3;

6   R^1 and R^2 are substituents independently selected from the group consisting of

7   halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)alkylthio, (C_1-C_4)haloalkyl,

8   (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino,

9   and di(C_1-C_4)alkylamino; and

10   R^3 is a substituent selected from the group consisting of (C_1-C_4)alkyl, $(C_1-$

11    $C_4)$haloalkyl and (C_1-C_4)acyl.

1   18.   A method in accordance with claim 17, wherein m is 0 and n is 1.

1   19.   A method in accordance with claim 17, wherein m is 0, n is 1 and

2   R^2 is selected from the group consisting of halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, $(C_1-$

3    $C_4)$alkylthio and (C_1-C_4)haloalkyl.

1   20.   A method in accordance with claim 17, wherein m is 0, n is 1 and

2   R^2 is selected from the group consisting of halogen and (C_1-C_4)alkylthio.

1   21.   A method in accordance with claim 14, wherein said compound is

2   selected from the group consisting of methiothepin, octoclothepin and pharmaceutically

3   acceptable salts thereof.

1   22.   A pharmaceutical composition comprising a pharmaceutically

2   acceptable carrier and a compound of the formula:
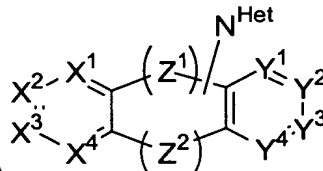
3
4   wherein
5   X^1, X^2, X^3 and X^4 are each independently members selected from the group
6   consisting of N and C-R^1, wherein R^1 is a member selected from the group
7   consisting of H, halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkyl,
8   (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino,
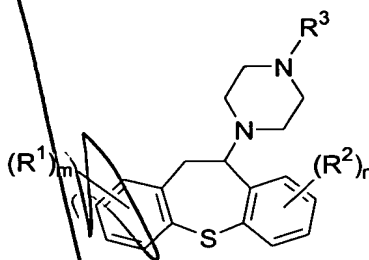9   and di(C_1-C_4)alkylamino;
10   Y^1, Y^2, Y^3 and Y^4 are each independently members selected from the group
11   consisting of N and C-R^2, wherein R^2 is a member selected from the group
12   consisting of H, halogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)haloalkyl,
13   (C_1-C_4)haloalkoxy, nitro, cyano, (C_1-C_4)acyl, amino, (C_1-C_4)alkylamino,
14   and di(C_1-C_4)alkylamino;
15   Z^1 is a divalent moiety selected from the group consisting of (C_1-C_3)alkylene;

16   Z^2 is a divalent moiety selected from the group consisting of –O-, -S- and -N(R^3)-

17   wherein R^3 is a member selected from the group consisting of H, halogen,

18   (C$_1$-C$_4$)alkyl, (C$_1$-C$_4$)alkoxy, (C$_1$-C$_4$)haloalkyl, (C$_1$-C$_4$)haloalkoxy, nitro,

19   cyano, (C$_1$-C$_4$)acyl, amino, (C$_1$-C$_4$)alkylamino, and di(C$_1$-C$_4$)alkylamino;

20   and

21   N^{Het} is a substituted or unsubstituted 4-, 5-, 6-, or 7-membered nitrogen

22   heterocycle.

1   23.   A composition in accordance with claim 22, wherein X^1, X^3, X^4,

2   Y^1, Y^2, Y^3 and Y^4 are all CH; Z^2 is –S-, and N^{Het} is a substituted 6-membered nitrogen

3   heterocycle.

1   24.   A composition in accordance with claim 22, wherein said

2   compound has the formula:

3

4   wherein

5   the subscripts m and n are independently integers of from 0 to 3;

6   R^1 and R^2 are substituents independently selected from the group consisting of

7   halogen, (C$_1$-C$_4$)alkyl, (C$_1$-C$_4$)alkoxy, (C$_1$-C$_4$)alkylthio, (C$_1$-C$_4$)haloalkyl,

8   (C$_1$-C$_4$)haloalkoxy, nitro, cyano, (C$_1$-C$_4$)acyl, amino, (C$_1$-C$_4$)alkylamino,

9   and di(C$_1$-C$_4$)alkylamino; and

10   R^3 is a substituent selected from the group consisting of (C$_1$-C$_4$)alkyl, (C$_1$-

11   C$_4$)haloalkyl and (C$_1$-C$_4$)acyl.

1   25.   A composition in accordance with claim 24, wherein m is 0 and n

2   is 1.

1   26.   A composition in accordance with claim 24, wherein m is 0, n is 1

2   and R^2 is selected from the group consisting of halogen, (C$_1$-C$_4$)alkyl, (C$_1$-C$_4$)alkoxy, (C$_1$-

3   C$_4$)haloalkyl and (C$_1$-C$_4$)alkylthio.

1   27.   A composition in accordance with claim 24, wherein m is 0, n is 1

2 and R^2 is selected from the group consisting of halogen and (C_1-C_4)alkylthio.

1   28.   A composition in accordance with claim 24, wherein said

2 compound is selected from the group consisting of methiothepin, octoclothepin and

3 pharmaceutically acceptable salts thereof.